

AMENDMENTS TO THE CLAIMS:

Please amend claim 21 and cancel without prejudice claim 23 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A method of hermetically packaging an electronic device, in an enclosure comprising mutually inter-engageable first and second housing members, comprising the steps of

- (i) securing the electronic device to the first housing member,
- (ii) engaging the first and second housing members such that an hermetic seal is provided there between,

wherein the engagement step is performed in a controlled atmosphere.

2. (previously presented) A method according to claim 1 wherein the first housing member comprises a base portion, to which the electronic device is secured during the securing step, and an engagement portion adapted to engage with the second housing member, and wherein the method further comprises the step of attaching the base portion to the engagement portion prior to engaging the first and second housing members.

3. (previously presented) A method according to claim 1 wherein the first and second housing members are adapted to inter-engage to form an interference fit there between, said interference fit providing the hermetic seal.

4. (previously presented) A method according to claim 1 wherein the enclosure further comprises a seal interposed between the first and second housing members, said seal providing the hermetic seal.

5. (previously presented) A method according to claim 4 wherein the seal comprises at least one of a metal, a eutectic alloy, an elastomer and an adhesive.

6. (previously presented) A method according to claim 5 wherein the seal comprises an indium seal.

7. (previously presented) A method according to claim 5 wherein the seal comprises a compressible elastomeric ring.

8. (previously presented) A method according to —claim 4 and further comprising the intermediate step of applying the seal to at least one of the first and second housing members prior to engaging the first and second housing members.

9. (previously presented) A method according to —claim 4 wherein the enclosure further comprises a spacer disposed adjacent the seal so as to preclude over-compression of the seal during the engagement step.

10. (previously presented) A method according to —claim 4 wherein the enclosure comprises a retainer disposed adjacent the seal so as to retain the seal.

11. (previously presented) A method according to claim 1 wherein the second housing member comprises a first substantially transmissive optical element and an engagement portion adapted to engage with the first housing member.

12. (previously presented) A method according to claim 11 wherein the hermetic seal is provided between the first housing member and the first optical element via a seal.

13. (previously presented) A method according to claim 11 wherein the second housing member is adapted to receive a second substantially transmissive optical element.

14. (previously presented) A method according to claim 1 wherein the controlled atmosphere comprises an inert gas.

15. (original) A method according to claim 14 wherein the inert gas comprises at least one of nitrogen and argon.

16. (previously presented) A method according to claim 1 wherein the controlled atmosphere comprises a vacuum.

17. (previously presented) A method according to claim 1 wherein the step of engaging the first and second housing members includes the step of bonding said housing members.

18. (original) A method according to claim 17 wherein the bonding step comprises one of friction welding and friction soldering.

19. (previously presented) A method according to claim 1 wherein the first and second housing members comprise metal cylinders having a substantially circular cross section.

20. (Cancelled)

21. (currently amended) An electronic device comprising an electronic element, a first housing member, and a second housing member, the first and second housing members having an engagement hermetic seal there between so as to define around the electronic element an hermetic enclosure having a controlled atmosphere within, wherein the engagement hermetic seal comprises an interference seal between the first and second housing members.

22. (previously presented) An electronic device comprising an electronic element, a first housing member, and a second housing member, the first and second housing members defining an hermetic enclosure,

wherein the electronic element is located within the hermetic enclosure and wherein the hermetic enclosure is formed by engaging the first and second housing members in a controlled atmosphere such that an engagement hermetic seal is provided there between.

23. (cancelled).

24. (previously presented) An electronic device according to claim 21 wherein the engagement hermetic seal comprises a friction weld between the first and second housing members.

25. (previously presented) An electronic device according to claim 21 and further comprising a seal interposed between the first and second housing members, said seal providing the engagement hermetic seal.

26. (previously presented) An electronic device according to claim 25 wherein the first and second housing members are held in engagement by an interference fit there between.

27. (previously presented) An electronic device according to claim 25 wherein the seal comprises at least one of a metal, a eutectic alloy, an elastomer and an adhesive.

28. (previously presented) An electronic device according to claim 27 wherein the seal comprises an indium seal.

29. (previously presented) An electronic device according to claim 27 wherein the seal comprises a compressible elastomeric ring.

30. (previously presented) An electronic device according to claim 25 wherein the enclosure further comprises a spacer disposed adjacent the seal so as to preclude over-compression of the seal.

31. (previously presented) An electronic device according to claim 25 wherein the enclosure comprises a retainer disposed adjacent the seal so as to retain the seal.

32. (previously presented) An electronic device according to claim 21 wherein the second housing member comprises a first substantially transmissive optical element and an engagement portion adapted to engage with the first housing member.

33. (previously presented) An electronic device according to claim 32 wherein the first optical element comprises a lens.

34. (previously presented) An electronic device according to claim 32 wherein the first optical element comprises at least one of chalcogenide glass, silicon and germanium.

35. (previously presented) An electronic device according to claim 32 wherein the engagement hermetic seal is provided between the first housing member and the first optical element via a seal.

36. (previously presented) An electronic device according to claim 32 wherein the second housing member includes a second substantially transmissive optical element.

37. (previously presented) An electronic device according to claim 36 wherein the second optical element comprises chalcogenide glass.

38. (previously presented) An electronic device according to claim 21 wherein the controlled atmosphere comprises an inert gas.

39. (original) An electronic device according to claim 38 wherein the inert gas comprises at least one of nitrogen and argon.

40. (previously presented) An electronic device according to claim 21 wherein the controlled atmosphere comprises a vacuum.

41-55. (cancelled)

56. (previously presented) An electronic device having a thermal detector housed within an hermetic enclosure comprising mutually inter-engaged first and second housing members, the second housing member comprising a first substantially transmissive optical element; wherein said housing members enclose the thermal detector within a controlled atmosphere and provide an engagement hermetic seal around said thermal detector.